



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6

**1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733**

April 21, 2014

Mr. Gary D. Goeke
Chief, Environmental Assessment Section
Leasing and Environment (MS 5410)
U.S. Department of Interior
Bureau of Ocean Energy Management
1201 Elmwood Park Boulevard
New Orleans, LA 70133-2394

RE: Final Supplemental Environmental Impact Statement (FSEIS) for Gulf of Mexico Outer Continental Shelf Oil and Gas Western Planning Area Lease Sales 238, 246, and 248

Dear Mr. Goeke:

In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA), the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) regulations for implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed its review of the FSEIS prepared by the Bureau of Ocean Energy Management.

EPA provided comments on the Draft Supplemental Environmental Impact Statement (DSEIS) on December 5, 2013, in which the DSEIS was rated as "EC-2", i.e., EPA has "environmental concerns and requests additional information". While many of our comments have been addressed in the FSEIS, EPA continues to have environmental concerns with the air modeling and the air quality impact analysis. We offer the following enclosed comments for your consideration and ask they be addressed in the Record of Decision (ROD).

Thank you for the opportunity to comment on the FSEIS. Please send a copy of the ROD to my attention. If you have any questions or concerns, please contact Kimeka Price at (214)665-7438 or via email at price.kimeka@epa.gov for assistance.

Sincerely,


for Rhonda Smith
Chief, Office of Planning
and Coordination

Enclosure

**DETAILED COMMENTS
ON THE
FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT
FOR THE
BUREAU OF OCEAN ENERGY MANAGEMENT'S
GULF OF MEXICO – OUTER CONTINENTAL SHELF
WESTERN PLANNING AREA LEASE SALES 238, 246, AND 248**

AIR QUALITY AND MODELING:

Section 3.1.1.5 – Air Emissions (pg. 3-11): This section of the FSEIS states that “[a]ir quality regulations are under a comprehensive review in 2014 to replace obsolete provisions and to ensure that updates in regulations are following improvements in scientific and technological information”. The basis of the statement should be explained, including the specific nature of the 2014 comprehensive review that is referred to.

Section 4.1.1.1 – Air Quality, Air Quality Modeling (pg. 4-10): On page 4-10, the FSEIS indicates that all modeling is below regulatory thresholds. This is not entirely correct. As on page 4-9, the FSEIS indicates that modeling was above EPA’s Class I SIL for the annual NO₂ standard. However, the NO₂ modeling is fairly close to the standard without the inclusion of surrounding NO_x sources.

The OCD modeling identified in the FSEIS is not necessarily conservative since the modeled emission rates are based on tons per year (tpy) and then averaged over 8,760 hours and do not reflect short term emission rates which could result in higher concentrations. Modeling should be redone with short-term emission rates to address the short-term standards, including 1-hour NO₂ standards. Furthermore, the assessment is completed for only one lease block and the cumulative maximum yearly emissions are on the order of 7.5 times higher than the 20,715 tpy modeled for one lease block. Some level of conservative assessment should be completed to represent a cumulative approach. While the emissions were all modeled in one location of the lease block and could have been spread out representing more of the area, the location of the lease block is not necessarily the closest lease block to shore and/or Class I receptors. Remodeling with multiple points within the lease block would be reasonable, but examination should include the nearest worst case lease block.

The FSEIS specifically notes that the modeling for the 1-hour NO_x as 177.67 micrograms/m³ however, the standard is 188 micrograms/m³. Further, the FSEIS specifically notes that the model value has a footnote, but there is no footnote. Considering the long distance of transport to Class I and on-shore receptors, it is expected that emitted NO is mostly converted to NO₂ by the time it reaches the receptors. Therefore, the ARM approach is recommended to account for conversion of 80% of the NO_x emissions to NO₂. Since this is fairly close to the standard, the modeling should be redone to ensure that National Ambient Air Quality Standards (NAAQS) are protected. Additionally, it is unclear if the background monitoring NO_x value was considered that would represent any existing NO_x sources in the modeling domain area and continental background NO_x concentrations.

Appendix A, Air Quality Offshore Modeling Analysis – General: The proposed lease sale is identified as an area encompassing about 63 million acres of the total CPA of 66.45 million acres. Partial and/or full development of this area would have a significant increase in emissions from the exploration and production of oil and gas, associated shipping, and other support operations. The ozone impact analysis relies on outdated modeling, by using 1-hour and 8-hour ozone standards dating back ten (10) to nineteen (19) years (Yarwood and Haney) and older estimates of emissions that do not include the additional growth. EPA lowered the ozone standard in 2008 to 75 ppb. Further, the ozone impact analyses in the FSEIS does not fully evaluate the impacts from full development of the lease blocks and in combination with existing OSC sources at multiple areas along the coast that have elevated ozone levels (i.e., Houston-Galveston-Brazoria Nonattainment area, Beaumont-Port Arthur Nonattainment area, and the New Orleans and Baton Rouge areas).

The analysis conducted by Yarwood in 2004 only focused on the Houston area for the 1-hour ozone standard and did not evaluate other areas along the Gulf that are exceeding or near exceeding the newer ozone standard (75 ppb). Exceedances of the 75 ppb ozone standard along the Gulf Coast on average have a higher percentage of contribution from transportation than the outdated ozone standards used. The OCS sources are increasing and could have a larger impact on ozone exceedance levels on-shore. Therefore, an updated ozone impact analysis should be conducted to evaluate the impacts of all of the existing OSC sources and the full development of the area that will be leased, including associated drilling and shipping emissions.

There is a brief discussion of an ongoing study that will use the updated “Year 2008 Gulfwide Emission Inventory Study” to model ozone formation. However, the FSEIS is unclear if this study will address the 75 ppb ozone standard and the potential areas of concern. Also, it is unclear if the analysis would include the emissions estimated in the 2008 report for existing OCS sources as 281,135 tpy or 770 tons per day (tpd) of NO_x. In comparison, the forty (40) year cumulative NO_x emissions from the proposed lease sale would add another 168,147 tpy or 460 tpd. This equates to about a 60% increase in NO_x emissions and does not include any other increases in emissions due to lease sales since the 2008 study.

The modeling documentation should include model performance evaluations for the meteorology and ozone in the FSEIS. The analysis should evaluate the impacts from OCS sources in the 2008 study and the future growth emissions from lease sales on air quality in Texas and Louisiana. The emissions increase of NO_x of 460 tpd is similar in magnitude to the current combined emissions of cars and trucks on the road in the Dallas/Ft. Worth, Texas and Houston/Galveston/Brazoria, Texas areas combined. With the emissions spread out over a large area, the ozone levels would be expected to increase by some amount. The FSEIS should address the increased air emissions on-shore when the winds transport the OCS emissions towards the areas of concern and receptors.

Appendix A, Air Quality Offshore Modeling Analysis – Table A-1 (pg. A-10): Table A-1 in the FSEIS appears to contain footnote indicators, but there are no associated footnotes. The indicators should be removed or include the associated footnotes.

Appendix B, Catastrophic Spill Event Analysis, Section B.3.1.1 – Air Quality/Overall Summary and Conclusion (pg. B-17): This section of the FSEIS states that “[m]easurements taken during an in-situ burning show that a major portion of compounds was consumed in the burn; therefore, pollutant concentrations would be expected to be within the NAAQS”. The testing document(s) supporting the measurements should be referenced or included in the FSEIS. The statement that a “major” portion of compounds was consumed in the burn does not sufficiently conclude that pollutant concentrations would not be expected to exceed related NAAQS.

Appendix D, Cumulative Impact Analysis, Section D.4.1.1.1 – Air Quality/OCS Oil- and Gas-Related Impacts (pg. D-4): This section of the FSEIS states that “[t]here is also a proposal to further decrease the ozone standard”. This statement appears to be inaccurate. The basis of the statement should be explained, including the specific nature of the proposal that is referred to.